

On-line Table 1: Imaging, fetopathologic, and immunohistologic findings in group A fetuses

| Case | US Findings | MR Findings | (ADC, $\mu\text{m}^2/\text{ms}$) | WM ROI | MR/Fetopathologic Examinations Delay (days) | GA at TOP (weeks) | Neuropathologic Findings | Immunohistologic Results | Placental Findings |
|------|--|---|-----------------------------------|------------------------|---|-------------------|--|---|--|
| 1 | Mild bilateral ventriculomegaly | Bilateral ventriculomegaly (15 mm on the right and 13 mm on the left), subependymal heterotopia, cavitation, WM: normal | 1.54 | Right frontal | 35 | 36 | Mild bilateral ventriculomegaly, subependymal heterotopia | A: +++ E: + M: 0 N: 0 O: 0 V: +++ | No abnormality |
| 2 | Intraventricular hemorrhage, frontal calcification | Polymicrogyria, calcified leukomalacia, WM: normal | 1.40 | Right frontal | 3 | 30 | Polymicrogyria, calcified intraventricular hemorrhage | A: ++ E: + M: ++ N: 0 O: 0 | No abnormality |
| 3 | Suspicion of lissencephaly | Lissencephaly, WM: normal | 1.65 | Left frontal | 17 | 32 | Microcephaly with simplified gyral pattern | A: ++ E: 0 M: + N: 0 O: 0 V: + | Placental hypotrophy, vascular lesions |
| 4 | Mild bilateral ventriculomegaly | Bilateral ventriculomegaly (14.6 mm on the right and 15 mm on the left), WM: normal | 1.75 | Right frontal | 18 | 34 | Mild bilateral ventriculomegaly, mild aqueductal stenosis | A: ++ E: + M: 0 N: 0 O: 0 V: +++ | Partial circumvallate, small infarcts (10 % of volume) |
| 5 | Suspicion of partial vermian agenesis | Partial vermian agenesis, WM: normal | 1.68 | Left frontal | 16 | 35 | Mild unilateral ventriculomegaly, partial vermian agenesis | A: +++ E: ++ M: 0 N: 0 O: 0 V: +++ | No abnormality |
| 6 | Cervical cystic lymphangioma | Lingual extension of the cystic lymphangioma, WM: normal | 1.80 | Right frontal | 17 | 34 | No cerebral abnormalities | A: ++ E: + M: + N: 0 O: 0 V: ++ | No abnormality |
| 7 | Severe unilateral ventriculomegaly | Left unilateral ventriculomegaly (35.7 mm), WM: normal | 1.62 | Right frontal | 6 | 37 | Severe unilateral ventriculomegaly | A: + E: 0 M: + N: 0 O: 0 V: ++ | No abnormality |
| 8 | Fetal hypokinesia | No structural abnormalities, WM: normal | 1.75 | Right frontal | 23 | 33 | Micrencephaly, arhinencephaly | A: +++ E: 0 M: + N: 0 O: 0 V: + | No abnormality |
| 9 | Corpus callosum agenesis, suspicion of posterior fossa abnormality | Corpus callosum agenesis, vermian hypoplasia, WM: normal | 1.70 | Right temporal | 4 | 34 | Corpus callosum agenesis, vermian hypoplasia, mild unilateral ventriculomegaly | A: + E: + M: + N: 0 O: 0 V: + | No abnormality |
| 10 | Cardiac rhabdomyoma, suspicion of Bourneville tuberous sclerosis | Subependymal tubers, WM: normal | 2.00 | Right occipital | 47 | 36 | WM, subependymal and cortical tubers | A: + E: 0 M: +++ N: 0 O: 0 V: + | Placental hypotrophy |
| 11 | IUGR, Doppler abnormalities | Subependymal pseudocysts, WM: *T1, **T2 (Figs 1A-C) | 1.70 | Left parieto-occipital | 4 | 31 | Delayed gyration, subependymal pseudocysts | A: + E: +++ M: +++ N: 0 O: 0 V: +++ | Placental hypotrophy, voluminous subchorionic thrombosis |
| 12 | Toxoplasmosis seroconversion | Focal parenchymal lesions, WM: normal | 1.64 | Left frontal | 6 | 29 | Necrotic focal parenchymal lesions | A: + E: 0 M: + N: 0 O: 0 V: ++ | Granulomatous villitis |

Note:—Immunohistochemical signal intensity was evaluated as mild (+), moderate (++) and high (+++). 0 indicates absence of abnormality; A, astrogliosis; E, edema; IUGR, intrauterine growth restriction; M, microgliosis; N, neuronal abnormalities; O, oligodendrocytic abnormalities; US, ultrasonography; WM, white matter; ROI, region of interest; ADC, apparent diffusion coefficient; GA, gestational age; TOP, termination of pregnancy; V, vessel proliferation or congestion; *T1, T1 hypointensity; **T2, T2 hyperintensity.

On-line Table 2: Imaging, fetopathologic, and immunohistologic findings in group B fetuses

| Case | US Findings | MR Findings | (ADC, $\mu\text{m}^2/\text{ms}$) | WM ROI | MR/Feto-pathologic Examinations Delay (days) | GA at TOP (weeks) | Neuropathologic Findings | Immunohistologic Results | Placental Findings |
|------|--|--|-----------------------------------|-------------------------|--|-------------------|--|--|---|
| 1 | Severe bilateral ventriculomegaly | Intraventricular and parenchymal hemorrhage, WM: *T1, **T2 | 2.20 | Left frontal | 2 | 35 | Severe bilateral ventriculomegaly, intraventricular and parenchymal hemorrhage | A: +++ E: +++ M: + N: 0 O: 0 V: +++ | Placental hypotrophy, mild ischemia |
| 2 | IUGR, Doppler abnormalities | No structural abnormalities, WM: *T1, **T2 | 2.25 | Left parieto-occipital | 5 | 33 | WM edema | A: ++ E: ++ M: +++ N: 0 O: 0 V: + | Velamentous cord insertion |
| 3 | Mild left ventriculomegaly, CMV infection, PCR + | Left ventriculomegaly (12.8 mm), ventricular septation, WM: *T1, **T2 | 2.28 | Left frontal | 20 | 38 | Mild bilateral ventriculomegaly, subependymal pseudocysts, viral inclusions | A: +++ E: + M: +++ N: 0 O: 0 V: ++ | Chronic villitis, no viral inclusions |
| 4 | CMV infection, PCR + | No structural abnormalities, WM: *T1, **T2 | 2.25 | Left frontal | 6 | 32 | Subependymal pseudocysts, viral inclusions | A: +++ E: + M: +++ N: 0 O: 0 V: + | Specific chronic villitis, viral inclusions |
| 5 | Familial history of Joubert syndrome, severe unilateral ventriculomegaly | Left ventriculomegaly (14 mm), WM: normal T1, **T2 (Figs 1D-F) | 2.10 | Left parieto-occipital | 14 | 33 | Mild unilateral ventriculomegaly | A: +++ E: + M: + N: 0 O: 0 V: + | Circummarginate placenta |
| 6 | Maternal CMV seroconversion, mild unilateral ventriculomegaly, bilateral subependymal pseudocysts, PCR - | Bilateral ventriculomegaly (both 13 mm), bilateral subependymal pseudocysts, WM: *T1, **T2 (Figs 1G-I) | 2.20 | Right frontal | 8 | 35 | Mild bilateral ventriculomegaly, bilateral subependymal pseudocysts, no viral inclusions, no fetal infection | A: +++ E: + M: + N: 0 O: 0 V: ++ | No abnormality |
| 7 | Mild bilateral ventriculomegaly, subependymal pseudocysts | Subependymal pseudocysts, WM: *T1, **T2 | 2.25 | Right occipital | 20 | 37 | Bilateral subependymal pseudocysts, macrencephaly, wide cavum | A: +++ E: + M: + N: 0 O: 0 V: + | No abnormality |
| 8 | IUGR, Doppler abnormalities | Delayed gyration, WM: *T1, **T2 | 2.40 | Right frontal | 11 | 33 | Delayed gyration | A: +++ E: +++ M: + N: 0 O: 0 V: + | Placental hypotrophy, villous ischemic change |
| 9 | Mild bilateral ventriculomegaly, CMV infection PCR + | Bilateral ventriculomegaly (14.1 mm on the right and 13.4 mm on the left), WM: *T1, **T2 | 2.39 | Right parieto-occipital | 10 | 38 | Mild bilateral ventriculomegaly, viral inclusions | A: +++ E: +++ M: +++ N: 0 | Specific chronic villitis, viral inclusions |

Note:—Immunohistochemical signal intensity was evaluated as mild (+), moderate (++) and high (+++). 0 indicates absence of abnormality; A, astrogliosis; E, edema; CMV, cytomegalovirus; IUGR, intrauterine growth restriction; M, microgliosis; N, neuronal abnormalities; O, oligodendrocytic abnormalities; PCR, polymerase chain reaction in amniotic fluid; US, ultrasonography; WM, white matter; ROI, region of interest; ADC, apparent diffusion coefficient; GA, gestational age; TOP, termination of pregnancy; V, vessel proliferation or congestion; *T1, T1 hypointensity, **T2, T2 hyperintensity.